

REMARKS

Applicants acknowledge receipt of the Office Action mailed June 4, 2007.

In the Office Action, the Examiner rejected claims 20, 22, 23*, 26-31, 38, and 39 under 35 U.S.C. § 103(a) as being unpatentable over *Coulthard* (U.S. Patent No. 5,825,286) in view of *Handfield et al.* (U.S. Patent No. 5,473,938); and rejected claim 33 under 35 U.S.C. § 103(a) as being unpatentable over *Coulthard* in view of *Handfield*, and further in view of *Widner* (U.S. Patent No. 6,199,575).

In this Amendment, Applicants amend claim 33. Upon entry of this Amendment, claims 20, 22, 23, 26-31, 33, 38, and 39 will be pending. Of these claims, claims 20, 38, and 39 are independent.

The originally-filed specification, claims, abstract, and drawings fully support the amendments to claim 33. No new matter has been introduced.

Applicants traverse the rejections above and respectfully request reconsideration for at least the reasons that follow.

I. 35 U.S.C. § 103(a) REJECTIONS

Applicants traverse the Examiner's rejection of claims 20-23, 26-31, 38, and 39 under 35 U.S.C. § 103(a) as being unpatentable over *Coulthard* in view of *Handfield*. Applicants respectfully submit that independent claims 20, 38, and 39 patentably distinguish over *Coulthard* and *Handfield* at least for the reasons described below.

* Applicants note that claim 21 was previously cancelled by the Amendment submitted March 19, 2007.

In order to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), the prior art reference (separately or in combination) must teach or suggest all the claim limitations. See M.P.E.P. § 2142, 8th Ed., Rev. 5 (August 2006). “[I]n formulating a rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed.” *USPTO Memorandum* from Margaret A. Focarino, Deputy Commissioner for Patent Operations, May 3, 2007, p. 2. “[T]he analysis supporting a rejection ... should be made explicit” and it is “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements in the manner claimed.” *Id.* (citing *KSR Int’l Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. Apr. 30, 2007)).

Coulthard appears to disclose a vehicular data collection and transmission system and method including selected vehicle operation parameters, such as tire pressure, wheel temperature, and vibration, which are sensed by sensors mounted on wheel modules secured to individual vehicle wheels. The sensed parameters are converted to digital format and the resulting digital data is manipulated to determine if the data falls within predetermined operating ranges. The data and information resulting from the manipulation are used to modulate an RF signal transmitted to another location on the vehicle. (*Coulthard*, Abstract).

As admitted by the Examiner, “Coulthard does not disclose...wherein the sensing device, transmitting device, processing unit, storage device, and the electrical energy device are produced on the same substrate.” (*Office Action*, p. 3, ll. 7-9).

In order to cure the deficiencies of *Coulthard*, the Examiner relies on *Handfield* and alleges “[i]n column 13, lines 55 through 62, Handfield discloses the that components of [the] system [are] disclosed on a single substrate.” (*Office Action*, p. 3, ll. 17-18). *Handfield* appears to disclose a method and system for monitoring a parameter of a vehicle tire. In one embodiment, a detector unit 10 disposed within the tire communicates with a central receiver unit over an electromagnetic path comprising one or more conductive components of the vehicle. (*Handfield*, Abstract). The detector/transmitter unit 10 is connected to wheel rim wall 314 via stud rivets 312. Pressurized gas is filtered by filter 324 before admittance to chamber 326. As illustrated in FIG. 9C, chamber 326 is enclosed by a capacitive plate 328 which flexes in response to the pressure of the admitted gas. The capacitive plate 328 is supported by spacers 330 above ceramic substrate 332. This ceramic substrate 332 also supports components 334 which make up the circuitry of the detector/transmitter unit 10. (*Id.* at col. 13, ll. 39-62).

Handfield, however, does not disclose wherein a sensing device, a transmitting device, a processing unit, a storage device, and an electrical energy generating device are produced on the same substrate (emphases added). Rather, as illustrated in FIG. 9C and disclosed in column 13, lines 63-65 of *Handfield*, “detector 10 is powered by battery 340 which is connected to circuitry 334 via pin 336 in battery connector 338.” The battery 340 is neither produced nor mounted on the substrate 332. In contrast, the battery 340 is only electrically connected to the circuitry 334 via the pin 336.

Accordingly, with respect to independent claims 20, 38, and 39, *Coulthard* and *Handfield* fail to teach Applicants’ claimed combination, including, *inter alia*:

“wherein the sensing device, the transmitting device, the processing unit, the storage device and the electrical energy generating device are produced on the same substrate.”

For at least the foregoing reasons, a *prima facie* case of obviousness has not been established with respect to independent claims 20, 38, and 39. Accordingly, independent claims 20, 38, and 39, and claims 22, 23, and 26-31 that depend from claim 20, are patentable over *Coulthard* and *Handfield*. Applicants therefore request that the rejection of claims 20, 22, 23, 26-31, 38, and 39 under 35 U.S.C. § 103(a) be withdrawn.

Claim 33 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Coulthard* in view of *Handfield*, and further in view of *Widner*. The deficiencies of *Coulthard* and *Handfield* are discussed above.

The Examiner relies on *Widner* for allegedly disclosing “a valve system [which] includes a movable microelectromechanically structured (MEMS) pressure sensor that not only senses pressure but also functions as a mechanical actuator for the valve...” (*Office Action*, p. 6, ll. 1-3). Such teaching, even if present in *Widner*, however, fails to teach or suggest, *inter alia*, “[a] system for sensing at least one characteristic parameter of a tyre fitted to a vehicle...wherein [a] sensing device, [a] transmitting device, [a] processing unit, [a] storage device and [an] electrical energy generating device are produced on [a] same substrate,” as required by claim 20. Therefore, *Widner* also fails to teach or suggest all of the limitations of claim 20, and claim 33 is therefore patentable over *Coulthard*, *Handfield*, and *Widner* at least due to its dependence from independent

claim 20. Applicants therefore request that the rejection of claim 33 under 35 U.S.C. § 103(a) be withdrawn.

II. CONCLUSION

Applicants respectfully submit that claims 20, 22, 23, 26-31, 33, 38, and 39 are in condition for allowance.

The Office Action contains characterizations of the claims and the related art with which Applicants do not necessarily agree. Unless expressly noted otherwise, Applicants decline to subscribe to any statement or characterization in the Office Action.

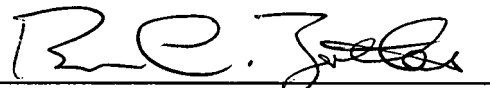
In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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